

L.E

BEFORE THE  
POLLUTION CONTROL HEARINGS BOARD  
STATE OF WASHINGTON

IN THE MATTER OF )  
RAYMOND E. ANDERS, )  
 )  
Appellant, )  
 )  
v. )  
 )  
STATE OF WASHINGTON, )  
DEPARTMENT OF ECOLOGY, )  
 )  
Respondent. )

PCHB No. 78-38

FINAL FINDINGS OF FACT,  
CONCLUSIONS OF LAW  
AND ORDER

Appellant challenges the validity of certain conditions which respondent, Department of Ecology, proposes to include in his permit to appropriate public waters. The matter came on for hearing before the Pollution Control Hearings Board, Dave J. Mooney, Chairman, and Chris Smith, Member, on June 30, 1978 in Ellensburg, Washington. Hearing examiner William A. Harrison presided. Respondent elected a forral hearing pursuant to RCW 43.21B.230.

Appellant Raymond E. Anders appeared pro se. Respondent Department of Ecology appeared by and through its attorney, Robert E.

1 Mack, Assistant Attorney General. Seattle reporter Kathie Brodie  
2 recorded the proceedings.

3 Witnesses were sworn and testified. Exhibits were examined.  
4 Having heard the testimony and examined the exhibits, and being fully  
5 advised, the Pollution Control Hearings Board makes these

6 FINDINGS OF FACT

7 I

8 Appellant, Raymond E. Anders, owns 200 acres of land along the  
9 Methow River in Okanogan County (Sec. 19, T.30 N., R. 23 E.W.M.). Of  
10 these, he farms 30 acres, and this is devoted to apple orchard. Appellant  
11 purchased the land in 1974 and obtained with it the right to irrigate  
12 by withdrawals from Black Canyon Creek. Black Canyon Creek was  
13 adjudicated by Okanogan County Superior Court in 1929. (See RCW 90.03.  
14 through .240 setting forth procedure for this type of adjudication).  
15 The water right in Black Canyon Creek which appellant acquired is among  
16 those dealt with in that adjudication. In drought periods water may  
17 not be available from Black Canyon Creek in sufficient quantity to  
18 irrigate appellant's land.

19 II

20 Seeking a supplemental water supply for his irrigation, appellant  
21 applied to Department of Ecology for a permit to withdraw ground water  
22 on July 7, 1977. The well for this withdrawal is presently in existence,  
23 and is located on a bench above the Methow River about 40 horizontal  
24 feet from the river's edge. The appellant selected this location  
25 because he anticipated, correctly, that the underground water-rich  
26 alluvial deposits would be deepest at close proximity to the river.

27 FINAL FINDINGS OF FACT,  
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1 III

2 After receipt of appellant's application for a ground water  
3 withdrawal permit, Department of Ecology conducted an examination  
4 consisting of: 1) a field inspection of the well and its surroundings  
5 and 2) application of the "Theis" equation to the appellant's well.  
6 Through this examination Department of Ecology concluded that at least  
7 95% of water withdrawn from appellant's well, within one day of pumping,  
8 would be river water.

9 Department of Ecology reached this determination by use of the  
10 mathematical "Theis" equation because the absolute quantity of water  
11 diverted through appellant's well is too small to measure by recording  
12 the river's rate of flow above and below the appellant's well. Neither  
13 is there any practical means available to Department of Ecology for  
14 actually tracing water from the river to appellant's well. The  
15 "Theis" equation, however, is a method, generally recognized in hydrology,  
16 for calculating the percentage of well withdrawal which is diverted  
17 from a nearby river when basic data concerning the area geology are  
18 known.

19 IV

20 The Report of Examination published by Department of Ecology,  
21 in response to the appellant's ground water application, recommended  
22 that a permit be granted but imposed conditions linking withdrawals  
23 from the well to a "base flow" in the Methow River. Specifically,  
24 the following conditions, pertinent to this appeal, were set forth  
25 in the Report of Examination:

26 FINAL FINDINGS OF FACT,  
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AND ORDER

1 Due to the proximity of this well to the Methow River  
2 and the resulting hydraulic continuity, the following  
3 provisions of the Methow River Basin Management Plan  
4 shall apply.

5 'This authorization is subject to the provisions of  
6 Chapter 173-548 WAC as adopted in Olympia, Washington,  
7 January 27, 1977, and the general rules of the Department  
8 of Ecology as specified under Chapter 173-500 WAC and others.

9 Base flows as established at monitoring station 12.4499.50  
10 at river mile 6.7, Sec. 20, T. 30 N., R. 23 E.W.M. and as  
11 presented in the table below shall be maintained by  
12 regulation of diversions including this one as set forth  
13 in said WAC 173-548.

14 Base flow hydrographs pages 49 and 50 in the document  
15 entitled 'Water Resources Management Program in the  
16 Methow River Basin,' dated October, 1976, shall be used  
17 for definition of base flows on those days not specifically  
18 identified in WAC 173-548. Base flows at Station 12.4499.50.

19	Month	Day	Base Flow (cfs)	Month	Day	Base Flow (cfs)
20	April	15	860	July	15	800
21	May	1	1300	August	1	480
22	May	15	1940	August	15	300
23	June	1	2220	September	1	300
24	June	15	2220	September	15	300
25	July	1	2150	October	1	360

26 No diversion of water under this authorization shall  
27 take place when the flow of the river falls below the  
28 above flows.'

29 Based on analysis of water availability for this location  
30 on the Lower Methow River, it appears that a firm supply  
31 (defined as that flow level at which the base flows are  
32 exceeded 9 out of every 10 years) will not be available  
33 during the months of April, August, and September.

34 Therefore, water shortages and regulations should be  
35 expected at least one year out of 10, but probably  
36 more often, during the above designated months.

37 Consequently, the holder of this water right is advised that  
38 cropping patterns should be developed and arranged so that  
39 in the event regulation of water use during these months  
40 is required, a major or long-term detrimental effect on  
41 the crop would not result.

42 . . . .

1 This Report of Examination was communicated to appellant along with  
2 Department of Ecology's statement that it constituted an appealable  
3 determination.

4 Appellant appeals from the conditions linking his permit for  
5 ground water to base flows in the Methow River. He contends that  
6 there has been no actual measurement of continuity between his well  
7 and the river, that base flows designed to protect the river therefore  
8 should have no application to his well and that such linkage of his  
9 well to the river would deprive him of ground water at the very times  
10 it is most needed, namely, when river flows are lowest.

11 V

12 Any Conclusion of Law which should be deemed a Finding of Fact  
13 is hereby adopted as such.

14 From these Findings, the Pollution Control Hearings Board comes  
15 to these

16 CONCLUSIONS OF LAW

17 I

18 In 1971 the Legislature enacted the Water Resources Act,  
19 90.54 RCW, and this language is found in that Act:

20 Utilization and management of the waters of the state  
21 shall be guided by the following declaration of  
22 fundamentals: . . .  
23 (3) The quality of the natural environment shall be  
24 protected and, where possible, enhanced as follows:  
25 (a) Perennial rivers and streams of the state  
26 shall be retained with base flows necessary to  
27 provide for preservation of wildlife, fish, scenic,  
aesthetic and other environmental values, and  
navigational values . . . . RCW 90.54.020(3) (a).

26 FINAL FINDINGS OF FACT,  
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1 is entitled "Water Resources Management Program, Methow River Basin"  
2 and is dated December, 1976. The publication states:

3 This document sets forth certain State management policies  
4 on water resources in the Methow River Basin. It is intended  
5 to provide a basis for making decisions on future water  
6 resource allocation and use. (P. 11).

7 . . . .  
8 The Department of Ecology's existing policy is to treat  
9 ground water, in measurable continuity with surface water,  
10 as being subject to the same criteria as surface water  
11 allocations. The proposed Methow River Basin Water  
12 Resources Management Program would not change this  
13 policy. (Emphasis added). (P. 7).

14 We therefore conclude that appellant's development of ground water  
15 "affects" surface waters (WAC 173-548-060, supra) where there is  
16 "measurable continuity" between the two. We further conclude that  
17 use of the "Theis" or similar equation is a permissible means of  
18 measuring continuity on the facts of this appeal. Such measurement  
19 having shown "95%" continuity between appellant's ground water development  
20 and the Methow River, we conclude that appellant's right to withdraw  
21 ground water was properly subjected to the same conditions as would  
22 be applied to surface water withdrawals and which have as their aim  
23 the preservation of base flows in the Methow River.

### 24 III

25 Appellant's right to withdraw ground water may be curtailed in  
26 times of water shortage. In this, there is no difference between  
27 his right and all other water rights ever granted by the state.  
28 Unlike water rights pre-dating or not governed by the Water Resource  
29 Management Programs adopted under chapter 90.54 RCW, a water shortage  
30 justifying curtailment of appellant's ground water right will be defined

31 FINAL FINDINGS OF FACT,  
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1 by reference to the established base flows necessary to protect the  
2 Methow River and its fish and wildlife. RCW 90.54.020(3)(a) and .900 and  
3 WAC 173-548-020 and -070. Despite this, diminishment of the Methow to its  
4 base flow does not automatically mandate curtailment of withdrawals under  
5 all "base flow permits" such as appellant would have. Rather, curtailment  
6 must proceed in an orderly fashion cognizant of the priority of each  
7 "base flow permit". WAC 173-548-040. Hence, the river must fall  
8 far enough below its base flow to justify curtailment of holders of  
9 "base flow permits" junior in priority to appellant's before appellant's  
10 withdrawals may be curtailed. For this reason, the wording in the  
11 Report of Examination: "No diversion of water under this authorization  
12 shall take place when the flow of the river falls below the above flows"  
13 is applicable only to the lowest priority "base flow permit". The  
14 appellant should inquire of the Department of Ecology as to the specific  
15 likelihood of curtailment given the specific priority which would  
16 pertain to his ground water right. This likelihood of curtailment  
17 may be different from the "one year out of ten" predicted in the  
18 Report of Examination. Such predictions, of course, are just that and  
19 are not legally binding upon the Department of Ecology should nature  
20 deviate.

21 IV

22 Appellant has not established any water right based upon  
23 historical withdrawals directly from the Methow River.

24 V

25 Any Finding of Fact which should be deemed a Conclusion of Law  
26 is hereby adopted as such.

27 FINAL FINDINGS OF FACT,  
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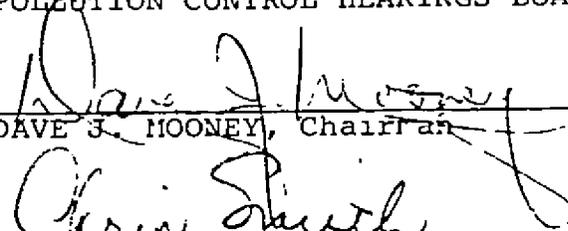
1 From these Conclusions, the Board enters this

2 ORDER

3 The determination of the Department of Ecology that appellant's  
4 ground water permit should issue only with the conditions set forth  
5 in its Report of Examination is hereby affirmed.

6 DONE at Lacey, Washington, this 18<sup>th</sup> day of August, 1978.

7 POLLUTION CONTROL HEARINGS BOARD

8   
9 DAVE J. MOONEY, Chairman

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11 CHRIS SMITH, Member

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27 FINAL FINDINGS OF FACT,  
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